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| 13. ABSTRACT (Maximum 200 words) The Gordon Research Conference (GRC) on Electrodeposition was held at Colby-Sawyer College, New London, NH, August 13-18, 2000. The conference was well attended with 106 participants. The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both US and foreign scientists, senior researchers, young investigators, and students. In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field. There was a conscious effort to stimulate lively discussion about the key issues in the field today. Time for formal presentations was limited in the interest of group discussions. In order that more scientists could communicate their most recent results, poster presentation time was scheduled. In addition to these formal interactions, "free time" was scheduled to allow informal discussions. Such discussions are fostering new collaborations and joint efforts in the field. | | | | |
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2000 GORDON RESEARCH CONFERENCE
on Electrodeposition
FINAL PROGRESS REPORT

AFOSR
F49620-00-1-0295

The Gordon Research Conference (GRC) on Electrodeposition was held at Colby-Sawyer College, New London, NH, August 13-18, 2000. The conference was well attended with 106 participants (list enclosed). The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both US and foreign scientists, senior researchers, young investigators, and students.

In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field. There was a conscious effort to stimulate lively discussion about the key issues in the field today. Time for formal presentations was limited in the interest of group discussions. In order that more scientists could communicate their most recent results, poster presentation time was scheduled. In addition to these formal interactions, "free time" was scheduled to allow informal discussions. Such discussions are fostering new collaborations and joint efforts in the field (program enclosed).

I want to personally thank you for your support of this Conference. As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings. If you wish any further details, please feel free to contact me. Thank you.

Dr. John Stickney
Conference Chair

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Gordon Research Conference on Electrodeposition

August 13 – 18, 2000,

Colby Sawyer College, New London, New Hampshire

Chairman: **John Stickney**, University of Georgia

Vice Chairman **Dan Schwartz**, University of Washington

Sunday, 4:00-6:00 Chairman's Reception for All Attendees

Sunday, 7:30

Magnetic Materials/CMP

Discussion Leader: **Larry Bottomley**, Georgia Institute of Technology

7:30pm **Alexander Bittner**, Max-Planck-Institut fuer Festkoerperforschung

"Electrodeposition and Self-Assembled Monolayers"

8:30pm **Gutmann, Ronald**, Rensselaer Polytechnic Institute

"Chemical-Mechanical Planarization (CMP) for Cu Damascene Patterning:

Trends, Metrics, Mechanisms and Cu-Deposition/Annealing Dependence"

Monday, 9:00am

Cu and VLSI

Discussion Leader: **Alan West**, Columbia University

9:00am **Panayotis Andricacos**, IBM

"Aspects of Copper Electrodeposition and Its Use in Semiconductor Fabrication"

10:00am Coffee Break

10:15am **Mihal Gross**, Bell Labs, Lucent Technologies

"Texture and Recrystallization in Electroplated Copper for Advanced Interconnects"

11:15am **Steven Mayer**, Novellus Systems

"VLSI Copper: The Electrodeposition Challenges"

4:00-6:00pm Poster Session, A

Monday 7:30pm

MEMS

Discussion Leader: **Dan Schwartz**, University of Washington

7:30pm **Kevin Kelly**, Louisiana State University

"Electroplated micro heat exchangers for gas turbine components and mechanical seals"

8:30pm **Sudipta Roy**, University of Newcastle, "Development of Gold

Electrodeposition Technology for Opto-Electronic Devices"

Tuesday 9:00am

Magnetic Materials

Discussion Leader: **Peter Searson**, Johns Hopkins University

9:00am **Walter Schwarzacher**, University of Bristol

"Pulse deposition of magnetic nanostructures"

10:00am Coffee Break

10:15am **Werner Schindler**, University of Karlsruhe

"Nanoscale electrodeposition of Co clusters"

11:15am **Tetsuya Osaka**, Waseda University

"New Creation of soft magnetic materials by electrodeposition for high magnetic recording."

4:00-6:00pm Poster Session, A

Tuesday 7:30pm Semiconductors

Discussion Leader: **Luisa Foresti**, University of Florence

7:30pm **Jay Switzer**, University of Missouri-Rolla

"Electrodeposited single crystals"

8:30pm **Curtis Shannon**, Auburn University

"Electrochemical ALE as a Route to Low-Dimensional Materials"

Wednesday 9:00am Surface Characterization

Discussion Leader: **Manny Soriaga**, Texas A&M University

9:00am **Klaus Wandelt**, University of Bonn

"Atomic-scale characterization of solid/electrolyte interfaces"

10:00am Coffee Break

10:15am **Werner Freyland**, University of Karlsruhe

"Electrochemical Phase formation and Phase transitions at Metal-Molten Salt Interfaces: ES-STM and Spectroscopic Studies"

11:15am **Karl Sieradzki**, Arizona State University

"Surfactant and defect-mediated electrochemical thin film growth"

4:00-6:00pm Poster Session, B

Wednesday 7:30pm Fundamentals

Discussion Leader: **Benjamin Scharifker**, Universidad Simon Bolivar

7:30pm **Juan Feliu**, Universidad de Alicante

"Adsorption properties and reactivity of Pt single crystals"

8:30pm **Eliezer Gileadi**, Tel Aviv University

"Mechanistic studies of the early stages of metal deposition employing the EQCM"

Thursday 9:00am Nanostructures

Discussion Leader: **Mike Sailor**, University of California, San Diego

9:00am **Jean-Claude Bradley**, Drexel University

"Bipolar Electrochemistry: Applications in Catalysis and Materials Science"

10:00am Coffee Break

10:15am **Jean Philippe Ansermet**, EPFL Lausanne

"Nanostructuring ferromagnets by template synthesis, probing the fundamentals of magnetism"

11:15am **Bernhard Gollas**, University of Southampton

"Nanostructured metal films from lyotropic liquid crystalline templates"

4:00-6:00pm Poster Session, B

Thursday 7:30pm Short Talks

Discussion Leader: **Dan Schwartz**, University of Washington

Conference Registration List

ELECTRODEPOSITION

Colby-Sawyer: 8/13/00 thru 8/18/00

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